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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,427	03/29/2004	Gerald Burt Kliman	RD-28,364-3	9782

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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
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NISKAYUNA, NY 12309

EXAMINER

CAZAN, LIVIUS RADU

ART UNIT	PAPER NUMBER
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3729

MAIL DATE	DELIVERY MODE
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05/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,427

Applicant(s)

KLIMAN ET AL.

Examiner

Livius R. Cazan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/17/2007 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1-15** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, as currently amended, claim 1 recites "directly molding composite tooth tips into contact with respective teeth of the laminated stator yoke, such that the composite tooth tips do not **extend** along the outer sides of the respective teeth" (step (b)). However, there does not appear to be support for this recitation in the specification. Looking at figure 4, tooth tips 24 clearly **extend** along the outer sides of the teeth (i.e. in the radially inwardly direction, toward the center

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of the stator), each tooth tip being an **extension** of a corresponding tooth. Moreover, the portion of the teeth to which the tooth tips are attached (see Fig. 4) can be thought of as an outer side of the teeth. Clearly then, the recitation "such that the composite tooth tips do not extend along the outer sides of the respective teeth" contradicts the disclosure.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-15** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claim 1 does not define the structure of the teeth sufficiently well to be able to determine which portions of each tooth are considered "sides." It is therefore unclear what is meant by "such that the composite tooth tips do not extend along the outer sides of the respective teeth." Moreover, this phrases makes it unclear as to which particular tooth tip does not extend along an outer side of a particular tooth.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. **Claims 1-3, and 7**, are rejected under 35 U.S.C. 102(b) as being anticipated by Mischler (US4255684 to Mischler et al.).

Regarding claim 1 (as best understood), Mischler discloses:

- Positioning pre-wound stator windings (14, 15, Figs. 1 and 4; see col. 1, ln. 45 to col. 2, ln. 15) around respective teeth of a laminated stator yoke (see Figs. 1 and 4)
- Directly molding composite tooth tips (18, 19, Figs. 1 and 4; see col. 1, ln. 45 to col. 2, ln. 15; see col. 2, lns. 60-68) into contact with respective teeth of the laminated stator yoke, such that the composite tooth tips do not extend along the outer sides of the respective teeth. In particular, it can clearly be seen that tooth tip 18 (Fig. 1) does not extend along an outer side of tooth 17, and tooth tip 19 does not extend along an outer side of tooth 16.

Regarding claim 2, the present specification discusses annealing before providing windings on the stator, as part of the conventional process (para. 0002, line 4). Therefore it is deemed that although Mischler does not specifically discuss annealing of the stator laminations, this operation is indeed performed, since doing so is part of the conventional process.

Regarding claim 3, the teeth point radially inward, and therefore the coils are inserted by sliding them radially over the teeth.

Regarding claim 7, the tooth tips are injection molded (col. 3, lns. 42-45).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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4. To the extent Applicant disagrees that Mischler discloses annealing the laminated stator yoke, **claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Applicant's admitted prior art (APA).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

5. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Satomi (JP7336992).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

6. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Crabb (US3862492).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

7. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Heidrich (US20020149282).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below. Note that the previous Action contained a typographical error, stating that claims 8-10 are unpatentable over Heidrich, rather than over Mischler in view of Heidrich. However, it is clear from the text of the rejection that Mischler is being used as a primary reference and Heidrich as the secondary reference.

8. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Kilman (US6274962).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.
See the response to arguments below.

9. **Claims 12-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler and Kilman as applied to claim 11, in view of Heidrich.

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.
See the response to arguments below.

Response to Arguments

10. Applicant's arguments filed 4/17/2007 have been fully considered but they are not persuasive. Regarding claims 1-3 and 7, Applicant argues Mischler does not disclose the newly recited limitations. However, as noted in the rejections under 35 U.S.C. 112, the amendment introduces new matter and presents certain deficiencies which make it unclear as to what is being claimed. As best understood, it is deemed Mischler still anticipates these claims (see appropriate rejection). Regarding claims 2, 4-6, and 8-15, Applicant argues they do not solve the deficiencies of Mischler, and are therefore allowable due to their dependence on claim 1. As discussed above, Mischler still anticipates claim 1, and therefore the rejections under 35 U.S.C. 103(a) are maintained.

Conclusion

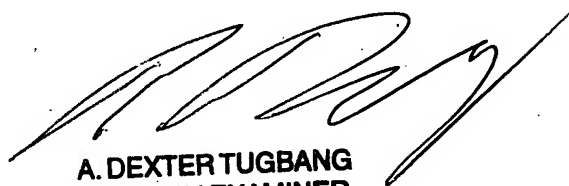
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Livius R. Cazan whose telephone number is (571) 272-8032. The examiner can normally be reached on 8:00AM-4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571)272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LRC/ 5/17/2007



A. DEXTER TUGBANG
PRIMARY EXAMINER